Remarks

This application is examined under a request for continued examination under 37 CFR 1.114. On the Office Action Summary mailed on 09/29/2006, boxes were checked indicating that the action is final and also indicating that the action is non-final. The applicants understand from a further reading of the Office Action and the PAIR system for this application that a non-final action was intended. The applicants have responded herein according to that understanding.

Claims 1 and 3 have been objected to due to the following informalities. In claim 1, the term "catheter" appears in the preamble instead of –cannula-- and therfore fails to provide a proper antecedent basis. In response, the applicants have amended claim 1 to cahange "catheter" to –cannula--. The applicants have also amended claim 8 to correct a similar defect. In claim 3, the word "and" is used rather than –are--, a typographical error. In response, the applicants have amended claim 3 to correct that error. It is believed that these amendments have obviated all of the grounds for objection.

Claims 1, 3, 4, 6, 8, 10 and 12 have bee rejected under 35 USC 102(b) as being anticipated by Quinn (US 5,201,723). In response, the applicants respectfully traverse the rejection. Quinn discloses a catheter for use in an angioplasty system and not a venous cannula for use with a cardiac bypass system as in the applicants' invention. To make this point more clearly, independent claims 1 and 8 have been amended to recite that a proximal end of the cannula is sized and adapted for connection to a cardiac bypass system. Support for this amendment can be found at the first sentence of paragraph 25 of the application. The device of Quinn is an angioplasty or angiography device which is not indicated to have a structure at a proximal end which would allow it to be connected to a cardiac bypass system. Further amendment to independent claims 1 and 8 presented herein additionally distinguish the applicants' invention from Quinn. Claims 1 and 8 now recite that the apertures include first and second corners defined by arcuate portions that intersect with each other. Support for this amendment can be found, for example, in paragraph 30 of the application. This structure is not found in Quinn, which discloses elliptical side holes in prior art catheters. In the applicants' invention, the first and second corners formed by arcuate portions of the aperture prevent outward buckling of

the aperture as the cannula is flexed while also minimizing kinking of the cannula. Quinn teaches the contrary, that is, that elliptical side holes in prior art catheters promote kinking of the catheter. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

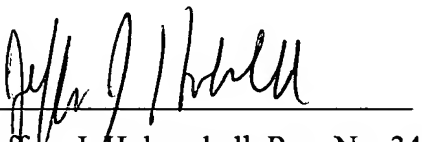
Claims 1, 3-8 and 10-13 have been rejected under 35 USC 103(a) as being unpatentable over Ginsburg (US 5,180,364). Applicants respectfully traverse the rejection. Ginsburg discloses a self-perfusing guiding catheter for use in angioplasty procedures in which blood enters the lumen of the catheter through side holes and discharges it at an open distal tip. Ginsburg does not disclose a venous cannula for use with a cardiac bypass system as in the applicants' invention. To make this point more clearly, independent claims 1 and 8 have been amended as set forth above to recite that a proximal end of the cannula is sized and adapted for connection to a cardiac bypass system. In addition, claims 1 and 8 now recite that the apertures include first and second corners defined by arcuate portions that intersect with each other. Ginsburg does not teach passageways of this configuration. Nor does Ginsburg teach the use of a plurality of such passageways organized on a cannula to prevent buckling or kinking. Ginsburg contains nonspecific teachings as to the shape and organization of passageways. That is, it teaches that the passageways can include "...a plurality of holes of any shape, size, and position along the distal end 222 of the catheter body 214." Such a teaching gives the person skilled in the art no guidance to make the applicants' claimed invention. In fact, such a teaching teaches away from using any particular shape at all since all shapes are indicated to be equally useful. The Office Action states that Ginsburg shows an aperture which is eye-shaped or which has two corners having a major axis which is perpendicular to the longitudinal axis of the catheter. Applicants respectfully disagree. The term eye-shaped is defined in paragraph 27 as "... defined by first arcuate portion 30 and second arcuate portion 32 that intersect with one another at two tips or corners 34, 36." The term "eye" or "eye-shaped" never appears in Ginsburg and the term "corner" or "arcuate" or "intersect" or the like are never used to describe the passageway shapes. Further, the orientation of the passageway with respect to the axis of the catheter is never mentioned as having any significance. Moreover, none of the passageways shown in Ginsburg appears to have the claimed configuration. As for oval shapes which may appear in

Ginsburg, the applicants' claims reciting apertures having an oval shape have been canceled. For these reasons, the applicants respectfully request that the rejection be withdrawn.

A supplemental information disclosure statement accompanies this response.

Reconsideration and allowance of the application, as amended, is respectfully requested.

Respectfully Submitted,



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